



# UNITED STATES PATENT AND TRADEMARK OFFICE

*[Signature]*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/656,581

09/05/2003

Richard Allen Brown

224162

7842

23460 7590 05/25/2007  
LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

EXAMINER

CHANNAVAJALA, LAKSHMI SARADA

ART UNIT

PAPER NUMBER

1615

MAIL DATE

DELIVERY MODE

05/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/656,581	<b>Applicant(s)</b> BROWN, RICHARD ALLEN	
	<b>Examiner</b> Lakshmi S. Channavajjala	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt of response and amendment to the specification dated 2-27-07 is acknowledged.

Claims 1-49 are pending in the instant application.

In response to applicants' query, examiner herewith confirms that the telephonic restriction/election requirement has been withdrawn. Accordingly, all the claims of the instant application have been considered for examination.

### ***Response to Arguments***

Applicant's arguments, filed 2-27-07, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection were made as follows:

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-7, 9-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,920,883 to Yamada et al (Yamada).

Yamada teaches a two-phase liquid cosmetic composition comprising an oil phase, a water phase, and organic liquid miscible with water and finely divided solid particles that are present at the interface between oil and water (C 2, L 15-27). Instant claims recite guanine at the interface of oil and water. Yamada teaches that the solid particles may be selected from inorganic and organic

Art Unit: 1615

particles, including the fish scale powder (which is a source of guanine, as evidenced by US 3,577,528 or US 4,116,628).

For claims 2-4, oil droplets; see col. 8, L 52-53.

For claim 5, see the examples of Yamada.

For claim 7, see col. 3, L 50-55. For claim 9, amount of guanine, see col. 4, L 14-16 and example 5.

For claim 9, example 5 teaches fish scale powder in an amount of 0.08 parts per 100 (0.08%), which is within the claimed range of 0.02% to 0.3%.

For claims 10-11, the examples of Yamada teach isopropyl alcohol as well as ethanol and the claimed amounts (see examples).

For claims 15, Yamada suggests one may include additional compositions such as perfume, antioxidants in the composition. Accordingly, a skilled artisan would have included a desired amount of perfume in the composition.

Yamada does not exemplify a composition containing silicone oil and guanine as claimed and instead teaches liquid paraffin. However, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to employ any of the oils described by Yamada including silicone oil, in the oil phase because Yamada suggests silicone oil as one of the suitable oils to prepare the oil phase, for their pearly appearance. With respect to the specific silicone oils claimed, Yamada suggests synthetic silicone oils are suitable and hence choosing an appropriate silicone oil so as to form the oil phase with desired pearly droplets in the two-phase composition would have been within the scope of a skilled artisan.

Art Unit: 1615

2. Claim 8 is are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,920,883 to Yamada et al (Yamada), as applied to claims 1-7, 9-12 and 15-17 above, and further in view of US 4,992,262 to Nakagaki et al (Nakagaki).

Yamada teaches fish scale powder in the two-phase composition but does not teach silanized guanine.

Nakagaki teaches powder-based cosmetic ingredients and a process of producing the same. Nakagaki teaches powdered cosmetics such as pigments (zinc oxide, titanium oxide etc), pearlescent pigments such as fish scale guanine (col. 2, L 24-42). Nakagaki further teaches coating the cosmetic powder materials with silicone or metallic soap for improved adherence (C 2, L 43-55). Thus, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to coat the fish scale powder (containing guanine) of Yamada with a coating material such as silicone (resulting in silanized guanine) because Nakagaki teaches that such a treatment imparts water repellency to the powder material. Accordingly, a skilled artisan would have employed silanized guanine in the composition of Yamada with an expectation to obtain a composition in which guanine with water repellency and in turn maintain guanine at the interface of oil and water phases.

3. Claims 12-14, 16-26 and 30-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,920,883 to Yamada et al (Yamada), as applied to

Art Unit: 1615

claims 1-7, 9-12 and 15 above, and further in view of US 6270782 to Sawyer et al (Sawyer).

Yamada, discussed above, fails to teach the claimed amounts of fragrances, perfumes, vitamins, pH and the spray assembly.

Sawyer teaches body spray composition with pearl-like oil-phase droplets in a spray assembly or transparent container, made of glass or plastic (C 3, I 27 and C 4, table). The composition of Sawyer comprises an oil phase containing a pigment that forms oil droplets and imparts pearlescence in an aqueous phase (abstract, for droplets are glossy pearls that are 1mm to 6mm col. 7, L 16-17). The oil phase further contains fragrances.

For claims 12-14, sawyer teaches that butylenes glycol at 0.5-5.0% is effective in maintaining the pearl (c5, L 52 & C 6, L 30).

For claims, 16-17, Sawyer teaches fragrances in an amount of 1.0 to 5.0% (C5, L 53).

For claims 18-20, Sawyer teaches mineral oil in the amount of 10-30% (C 5, L 46).

For claims, For claims 21-26, Sawyer teaches several pigments such as mica, titanium oxide (tables in col. 5-6), which are also claimed in the instant.

For claims 30-32, Sawyer teaches vitamins and their amounts in col. 10, L 9-28).

For claim 33, Sawyer teaches that the composition has a pH of 7.8 or in the range of 3.0-7.0 and overlaps with the instant pH range (col. 16-21).

Art Unit: 1615

For the claims related to the spray assembly, the spray assembly of Sawyer is described in col.3, which is a container with a liquid composition, a spray pump, a dip tube and a spray nozzle. Sawyer teaches that the dip tube is usually made of polyethylene and summarizes the type of plastic materials that affect the droplets (table from col.4 to col. 5). Among the suitable plastic materials, Sawyer teaches fluorinated polyethylene (3<sup>rd</sup> material in the above table) and polyvinyl chloride as suitable materials that cause no apparent deformities of the pearl-like droplets, thus suggesting the claimed fluorinated dip tube of the instant spray assembly. The composition of Sawyer is a body spray and hence meets the limitation of claim 34.

It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to employ the spray assembly of Sawyer for the pearlescent composition of Yamada because Sawyer teaches that the spray assembly helps in maintaining and retaining the "pearls" and avoid unsightly pump dip tube and that the material of the spray assembly helps in maintaining the pearly droplets. Further, including the components such as emollients, vitamins, fragrances and optimize the pH of the composition without affecting the pearl droplets and yet achieving the desired benefit would have been within the scope of a skilled artisan.

Sawyer does not teach shape of the container wall as in claims 37-40 and radius and height of the container. Further, Sawyer teaches a dip tube that does not extend into the composition due to the fact that the droplets cling to the composition. Sawyer teaches that although the oil droplets or spheres are

Art Unit: 1615

heavier than the liquid phase and thus form the layer at the bottom of container, the invention includes compositions, which have oil phase droplets that are higher than the water phase, and thus exists in a layer at the top of the composition (C 1, L 53-59). Thus, when the oil phase is on the top of the container, the dip tube is in the oil phase without breaking the droplets and hence meets the limitation of claim 36 c). Further, in the absence of any unexpected result, choosing the shape and size of the container containing oily droplets composition of Sawyer would have been within the scope of a skilled artisan because Sawyer teaches a container that serves the purpose of spraying the composition effectively.

4. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,920,883 to Yamada et al (Yamada), as applied to claims 1-7, 9-12 and 15 above, and further in view of any one of US 5,384,114 to Dowell et al (Dowell) or US 6,203,807 to Lemann.

Yamada, discussed above, suggests silicone oils in the oil phase of the composition but fails to teach a combination of two silicone oils.

Dowell teaches an opacifier composition comprising pearlizer or opacifiers, used for cosmetic compositions such as hair, skin etc (abstract). Dowell teaches silicone conditioning agents such as volatile and non-volatile silicone oils (col. 11, L 50 though Col. 12, L 60). Example compositions (col. 19 and 20), particularly recite a combination of silicones (silicone blends), which meet the instant claim requirements.



Art Unit: 1615

Lemann teaches a cosmetic composition comprising a lipophilic continuous phase containing a pigment, in which the continuous phase has a oil selected from hydrocarbon oils, silicone oils etc. Among the silicone oils, Lemann teaches those claimed in the instant invention (col. 5, L 34-42) and for the mixtures of silicones (example 1). Lemann additionally teaches pearlescent agents to impart color and opacity to the composition.

It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to employ a combination of silicones such as volatile and non-volatile silicones in the oil phase of Yamada because while Lemann suggests that the oil phase of a pearlescent composition may contain a single silicone or mixture of silicones, Dowell suggests that a combination of volatile and non-volatile silicones impart a conditioning effect and improved feel. Thus, a skilled artisan would have expected an improved conditioning and feel with a combination of silicones in the composition of Yamada.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 7.00 AM -4.00 PM.

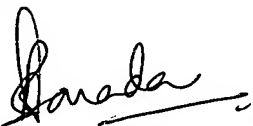
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373.

Art Unit: 1615

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AU 1615  
May 23, 2007



LAKSHMI S. CHANNAVAJJALA  
PRIMARY EXAMINER